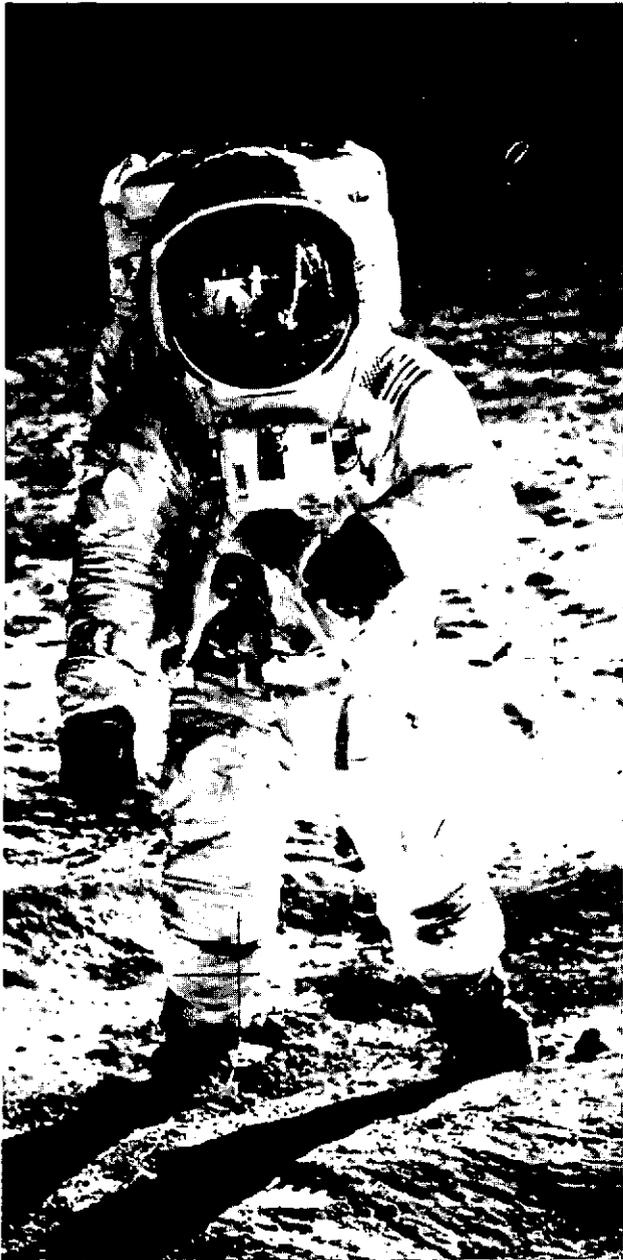


# NASA ASTRONAUTS

## FACT SHEET

RELEASE NO: 75-20



INFORMATION ABOUT THE 73  
ASTRONAUTS SELECTED BY THE  
NATIONAL AERONAUTICS AND  
SPACE ADMINISTRATION SINCE  
1959

(NASA-TM-X-72186) INFORMATION ABOUT THE  
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RELEASE NO: 75-20

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January 1975

ASTRONAUT FACT SHEET

Of 73 pilots and scientists selected as astronauts since April 1959, 33 are on flight status at the National Aeronautics and Space Administration's Lyndon B. Johnson Space Center, Houston. The number of pilot-astronauts is 25 and 8 are scientist-astronauts.

Forty astronauts are no longer on the active list -- 31 pilots and nine scientists.

Seven groups of astronauts have been selected. In Group I were the seven Mercury astronauts selected in April 1959. Nine test pilots, Group II, were selected in September 1962. In Group III were 14 pilot-astronauts selected in October 1963. Group IV, the first six scientist-astronauts, was selected in June 1965. In April 1966, 19 pilot-astronauts were selected as Group V. Group VI, 11 scientist-astronauts, was selected in August 1967. Seven Air Force Manned Orbital Laboratory pilots joined the NASA pilot-astronaut program in August 1969, as Group VII.

- more -

ALPHABETICAL LIST OF THE 73 ASTRONAUTS SELECTED

<u>NAME</u>	<u>STATUS</u>	<u>GROUP NO.</u>
Aldrin, Edwin E., Jr.	Inactive	III
Allen, Joseph P.	Active	VI
Anders, William A.	Inactive	III
Armstrong, Neil A.	Inactive	II
Bassett, Charles A.	Deceased	III
Bean, Alan L.	Active	III
Bobko, Karol J.	Active	VII
Borman, Frank	Inactive	II
Brand, Vance D.	Active	V
Bull, John S.	Inactive	V
Carpenter, M. Scott	Inactive	I
Carr, Gerald P.	Active	V
Cernan, Eugene A.	Active	III
Chaffee, Roger B.	Deceased	III
Chapman, Philip K.	Inactive	VI
Collins, Michael	Inactive	III
Conrad, Charles	Inactive	II
Cooper, L. Gordon	Inactive	I
Crippen, Robert L.	Active	VII
Cunningham, Walter	Inactive	III
Duke, Charles M., Jr.	Active	V
Eisele, Donn F.	Inactive	III
England, Anthony W.	Inactive	VI
Engle, Joe H.	Active	V
Evans, Ronald E.	Active	V
Freeman, Theodore C.	Deceased	III
Fullerton, Charles G.	Active	VII
Garriott, Owen K.	Active	IV
Gibson, Edward G.	Inactive	IV
Givens, Edward G.	Deceased	V
Glenn, John H.	Inactive	I
Gordon, Richard F., Jr.	Inactive	III
Graveline, Duane E.	Inactive	IV
Grissom, Virgil I.	Deceased	I
Haise, Fred W., Jr.	Active	V
Hartsfield, Henry W.	Active	VII
Henize, Karl G.	Active	VI
Holmquest, Donald L.	Inactive	VI
Irwin, James B.	Inactive	V
Kerwin, Joseph P.	Active	IV
Lenoir, William B.	Active	VI
Lind, Don L.	Active	V

<u>NAME</u>	<u>STATUS</u>	<u>GROUP NO.</u>
Llewellyn, John A.	Inactive	VI
Lousma, Jack R.	Active	V
Lovell, James A., Jr.	Inactive	II
Mattingly, Thomas K., II	Active	V
McCandless, Bruce, II	Active	V
McDivitt, James A.	Inactive	II
Michel, F. Curtis	Inactive	IV
Mitchell, Edgar D.	Inactive	V
Musgrave, Story	Active	VI
O'Leary, Brian T.	Inactive	VI
Overmyer, Robert F.	Active	VII
Parker, Robert A.	Active	VI
Peterson, Donald H.	Active	VII
Pogue, William R.	Active	V
Roosa, Stuart A.	Active	V
Schirra, Walter M., Jr.	Inactive	I
Schmitt, Harrison H.	Inactive	IV
Schweickart, Russell L.	Inactive	III
Scott, David R.	Inactive	III
See, Elliot J.	Deceased	II
Shepard, Alan B., Jr.	Inactive	I
Slayton, Donald K.	Active	I
Stafford, Thomas P.	Active	II
Swigert, John L., Jr.	Inactive	V
Thornton, William E.	Active	VI
Truly, Richard H.	Active	VII
Weitz, Paul J.	Active	V
Williams, Clifton C.	Deceased	III
White, Edward H., II	Deceased	II
Worden, Alfred M.	Inactive	V
Young, John W.	Active	II

Group I, Project Mercury Astronauts selected April 1959

Active

Donald K. Slayton, Civilian, and Docking Module  
Pilot, U.S. Crew for Apollo Soyuz Test Project (ASTP)

Inactive

M. Scott Carpenter, Commander, USN (Ret.), joined  
U.S. Navy Sealab program 1967. Retired from Navy  
July 1969 and in private business, Los Angeles, Calif.

L. Gordon Cooper, Colonel, USAF (Ret.), retired July  
1970; is in private business. He resides in Los  
Angeles, Calif.

John H. Glenn, Jr., Colonel, USMC (Ret.), resigned in  
1964. Elected to U.S. Senate, Ohio, November 1974.

Virgil I. (Gus) Grissom, Lieutenant Colonel, USAF,  
died in Apollo spacecraft fire at Cape Kennedy,  
January 1967.

Walter M. Schirra, Jr., Captain, USN (Ret.), retired  
in July 1969. His business interest is Schirra  
Enterprises, Denver, Colo.

Alan B. Shepard, Jr., Rear Admiral, USN (Ret.),  
retired from the U.S. Navy and NASA August 1, 1974.  
He is Chairman, Marathon Construction Co., Houston, Tex.

Group II, Test Pilot Astronauts selected September 1962

Active

Thomas P. Stafford, Brigadier General, USAF, and  
Commander U.S. Crew for ASTP.

John W. Young, Captain, USN, and Chief, Astronaut  
Office, Flight Operations Directorate, Johnson  
Space Center.

Inactive

Neil A. Armstrong, University Professor of Engineer-  
ing, University of Cincinnati, effective October 1971.  
Previously was Deputy Associate Administrator, Aero-  
nautics, NASA Headquarters Office of Advanced Research  
and Technology since 1970.

Frank Borman, Colonel, USAF (Ret.), Executive Vice President and General Operations Manager, Eastern Airlines, Miami, since July 1970.

Charles Conrad, Captain, USN (Ret.), effective Feb. 1, 1974. He is Vice President, Operations & Chief Operating Officer, American Television and Communications Corp., Denver, Colo.

James A. McDivitt, Brig. General, USAF (Ret.), Senior Vice President, Consumers Power Co., Jackson, Mich., September 1, 1972. He was manager, Apollo Spacecraft Program, NASA Manned Spacecraft Center, September 1969-1972.

James A. Lovell, Jr., Captain, USN (Ret.), is Senior Executive Vice President, Bay-Houston Towing Co., Houston, since March 1973. He served as Deputy Director of Science and Applications, JSC, May 1971-March 1973.

Elliot M. See, Jr., died in a T-38 jet crash February 1966, Lambert Municipal Airport, St. Louis.

Edward H. White, II, Lieutenant Colonel, USAF, died in Apollo spacecraft fire at Cape Kennedy, Fla., January 1967.

Group III, Pilot Astronauts selected October 1963

Active

Alan L. Bean, Captain, USN, and Backup Commander for U.S. ASTP Crew.

Eugene A. Cernan, Captain, USN, and Special Assistant to Apollo Spacecraft Program Manager, JSC.

Inactive

William A. Anders, Nominated as Chairman, Nuclear Regulatory Commission in October 1974. Appointed as Commissioner to the Atomic Energy Commission, August 1973. He served as Executive Secretary, National Aeronautics and Space Council, September, 1969-1973.

Edwin E. Aldrin, Jr., Colonel, USAF (Ret.). He resigned from NASA July 1971 and served as Commander of the Air Force Aerospace Research Pilots School, Edwards, Calif., until he retired from active duty about March 1, 1972. Resides in Hidden Hills, Calif.

Charles A. Bassett, II, Major, USAF, died in T-38 jet crash with Elliot See, February 1966 at St. Louis.

Roger B. Chaffee, Lieutenant Commander, USN, died in Apollo spacecraft fire, Cape Kennedy, Fla., January 1967.

Michael Collins, became Assistant Secretary of State for Public Affairs in January 1970. Since February 1971 is Director, National Air and Space Museum, Smithsonian Institution, Washington, D.C.

Walter Cunningham, resigned August 1, 1971. He is now President, Hydrotech International, Inc., Houston.

Donn F. Eisele, Colonel, USAF (Ret.). Resigned from NASA and retired from the Air Force, July 1972 and joined the Peace Corps. Served as technical assistant for Manned Space Flight, NASA Langley Research Center, Hampton, Va., 1970-1972. Currently resides in Williamsburg, Va.

Theodore C. Freeman, Captain, USAF, died in T-38 crash Ellington AFB, Houston, October 1964.

Richard F. Gordon, Jr., Captain, USN (Ret.), retired from the Navy and NASA January 1, 1972; Executive Vice President, New Orleans Saints, professional football organization, New Orleans, La.

Russell L. Schweickart, appointed to Office of Applications, NASA Headquarters, Washington, D.C., May 1, 1974. Named Director of User Affairs, Office of Applications in August 1974.

David R. Scott, Colonel, USAF, was appointed Deputy Director, NASA Flight Research Center, Edwards, Calif., August 1973. He served as a special assistant for mission operations, Apollo Spacecraft Program Office, JSC, July 1972-August 1973.

#### Group IV, Scientist Astronauts selected June 1965

##### Active

Owen K. Garriott, Ph.D. (Electrical Engineering)  
Deputy Director, Sciences & Applications  
Directorate, JSC.

Joseph P. Kerwin, Captain, USN, M.D. (Medicine) and  
Chief, Life Sciences Astronaut Office, JSC.

Inactive

Edward G. Gibson, Ph.D. (Engineering and Physics) joined Aerospace Corporation, El Segundo, Calif. on December 1, 1974 as senior scientist.

Duane E. Graveline, M.D. (Medicine), resigned for personal reasons in 1965. Now with State of Vermont, Department of Health, Winooski, Vt.

Harrison H. Schmitt, Ph.D. (Geology), assigned as Special Assistant to NASA Administrator for Energy Research and Development, February 1974; appointed NASA Assistant Administrator for Energy Programs NASA Headquarters, Washington, D.C., May 1974.

Frank Curtis Michel, Ph.D. (Physics), resigned August 1969 to return to scientific research at Rice University, Houston.

Group V Pilot Astronauts selected April 1966

Active

Vance D. Brand, Civilian and Command Module Pilot, U.S. ASTP Crew.

Gerald P. Carr, Colonel, USMC.

Charles M. Duke, Jr., Colonel, USAF, and Technical Assistant to Manager for Space Shuttle Systems Integration, JSC.

Joe H. Engle, Colonel, USAF.

Ronald E. Evans, Captain, USN, Backup Command Module Pilot U.S. ASTP Crew.

Fred W. Haise, Jr., Civilian, and Technical Assistant to Space Shuttle Orbiter Project Manager, JSC.

Don L. Lind, Civilian, Ph.D. (Physics).

Jack R. Lousma, Lt. Colonel, USMC, and Backup Docking Module Pilot for U.S. ASTP Crew.

Thomas K. Mattingly, II, Commander, USN

Bruce McCandless, II, Commander, USN

William R. Pogue, Colonel, USAF

Stuart A. Roosa, Colonel, USAF

Paul J. Weitz, Captain, USN

Inactive

John S. Bull, Lt. Commander, USN, (Ret.), withdrew because of pulmonary disease July 1968. Resides in Los Altos, Calif.

Edward G. Givens, Jr., Major, USAF, died in an automobile accident near Houston, June 1967.

James B. Irwin, Colonel, USAF, (Ret.), retired from USAF and NASA August 1, 1972; is engaged in Christian evangelical organization, High Flight, Colorado Springs, Colo.

Edgar D. Mitchell, Captain, USN, (Ret.), retired from Navy and NASA October 1, 1972. He is Chairman, Institute of Noetic Sciences, Palo Alto, Calif.

John L. Swigert, Jr., appointed Staff Executive Director, Committee on Science and Astronautics, House of Representatives, in April 1973.

Alfred M. Worden, Colonel, USAF, assigned to NASA Ames Research Center, Mountain View, Calif., September 1972. He is Chief, Systems Studies Division.

Group VI Scientist Astronauts Selected August 1967 (all civilian)

Active

Joseph P. Allen, Ph.D. (Physics)

Karl G. Henize, Ph.D. (Astronomy)

William B. Lenoir, Ph.D. (Electrical Engineering)

Story Musgrave, M.D., Ph.D. (Medicine & Physiology)

Robert A. Parker, Ph.D. (Astronomy) and Chief, Science and Applications, Astronaut Office.

William E. Thornton, M.D. (Medicine)

Inactive

Philip K. Chapman, Sc.D. (Aeronautics & Astronautics), resigned in July 1972 to accept position as a research scientist with AVCO, Everett Research Laboratories, Everett, Mass., and serve as a senior research associate at the MIT Measurement Systems Laboratory, Cambridge, Mass.

Anthony W. England, Ph.D. (Geology and Physics), resigned in August 1972 to accept position with U.S. Geological Survey, Denver, Colo.

John A. Llewellyn, Ph.D. (Chemistry), resigned for personal reasons, August 1968; presently is a professor of Chemistry, State University of Florida, Tallahassee.

Brian T. O'Leary, Ph.D. (Astronomy), resigned for personal reasons, April 1968. He is a professor at Hampshire College, Amherst, Mass.

Donald L. Holmquest, M.D. and Ph.D. (Medicine & Physiology), took leave of absence May 1971, to hold position of assistant professor of Radiology and Physiology, Baylor College of Medicine, Houston. Currently, he is associated with the Eisenhower Memorial Hospital, Palm Springs, Calif.

Group VII Pilot Astronauts, former Air Force Manned Orbiting Laboratory Pilots who entered NASA program in August 1969

Karol J. Bobko, Lt. Colonel, USAF

Robert L. Crippen, Commander, USN

Charles G. Fullerton, Lt. Colonel, USAF

Henry W. Hartsfield, Jr., Lt. Colonel, USAF

Robert F. Overmyer, Lt. Colonel, USMC

Donald H. Peterson, Colonel, USAF

Richard H. Truly, Commander, USN

APOLLO FLIGHT CREWS

Apollo 7

Flight Crew:

Commander, Walter M. Schirra  
CM Pilot, Donn F. Eisele  
LM Pilot, Walter Cunningham

Backup Crew:

Commander, Thomas P. Stafford  
CM Pilot, John W. Young  
LM Pilot, Eugene A. Cernan

Apollo 8

Flight Crew:

Commander, Frank Borman  
CM Pilot, James A. Lovell, Jr.  
LM Pilot, William A. Anders

Backup Crew:

Commander, Neil A. Armstrong  
CM Pilot, Edwin E. Aldrin, Jr.  
LM Pilot, Fred W. Haise, Jr.

Apollo 9

Flight Crew:

Commander, James A. McDivitt  
CM Pilot, David R. Scott  
LM Pilot, Russell L. Schweickart

Backup Crew:

Commander, Charles Conrad, Jr.  
CM Pilot, Richard F. Gordon  
LM Pilot, Alan L. Bean

Apollo 10

Flight Crew:

Commander, Thomas P. Stafford  
CM Pilot, John W. Young  
LM Pilot, Eugene A. Cernan

Backup Crew:

Commander, L. Gordon Cooper  
CM Pilot, Donn F. Eisele  
LM Pilot, Edgar D. Mitchell

Apollo 11

Flight Crew:

Commander, Neil A. Armstrong  
CM Pilot, Michael Collins  
LM Pilot, Edwin E. Aldrin, Jr.

Backup Crew:

Commander, James A. Lovell, Jr.  
CM Pilot, William A. Anders  
LM Pilot, Fred W. Haise, Jr.

Apollo 12

Flight Crew:

Commander, Charles Conrad, Jr.  
CM Pilot, Richard F. Gordon, Jr.  
LM Pilot, Alan L. Bean

Backup Crew:

Commander, David R. Scott  
CM Pilot, Alfred M. Worden  
LM Pilot, James B. Irwin

Apollo 13

Flight Crew:

Commander, James A. Lovell, Jr.  
CM Pilot, John L. Swigert, Jr.\*  
LM Pilot, Fred W. Haise, Jr.

\*Substituted for Thomas K. Mattingly, II, who had been exposed to, but did not contract, measles.

Backup Crew:

Commander, John W. Young  
CM Pilot, John L. Swigert, Jr.  
LM Pilot, Charles M. Duke, Jr.

Apollo 14

Flight Crew:

Commander, Alan B. Shepard, Jr.  
CM Pilot, Stuart A. Roosa  
LM Pilot, Edgar D. Mitchell

Backup Crew:

Commander, Eugene A. Cernan  
CM Pilot, Ronald E. Evans  
LM Pilot, Joe H. Engle

Apollo 15

Flight Crew:

Commander, David R. Scott  
CM Pilot, Alfred M. Worden  
LM Pilot, James B. Irwin

Backup Crew:

Commander, Richard F. Gordon, Jr.  
CM Pilot, Vance D. Brand  
LM Pilot, Harrison H. Schmitt

Apollo 16

Flight Crew:

Commander, John W. Young  
CM Pilot, Thomas K. Mattingly, II  
LM Pilot, Charles M. Duke, Jr.

Backup Crew:

Commander, Fred W. Haise, Jr.  
CM Pilot, Stuart A. Roosa  
LM Pilot, Edgar D. Mitchell

Apollo 17

Flight Crew:

Commander, Eugene A. Cernan  
CM Pilot, Ronald E. Evans  
LM Pilot, Harrison H. Schmitt

Backup Crew:

Commander, John W. Young  
CM Pilot, Stuart A. Roosa  
LM Pilot, Charles M. Duke, Jr.

SKYLAB CREWS

First Manned Mission

Flight Crew:

Commander, Charles Conrad, Jr.  
Science Pilot, Dr. Joseph P. Kerwin  
Pilot, Paul J. Weitz

Backup Crew:

Commander, Russell L. Schweickart  
Science Pilot, Dr. Story Musgrave  
Pilot, Bruce McCandless, II

Second Manned Mission

Flight Crew:

Commander, Alan L. Bean  
Science Pilot, Dr. Owen K. Garriott  
Pilot, Jack R. Lousma

Backup Crew:

Commander, Vance D. Brand  
Science Pilot, Dr. Don L. Lind  
Pilot, Dr. William E. Lenoir

Third Manned Mission

Flight Crew:

Commander, Gerald P. Carr  
Science Pilot, Dr. Edward G. Gibson  
Pilot, William R. Pogue

Backup Crew:

(Same backup crew as Second Manned Mission)

APOLLO SOYUZ TEST PROJECT CREW (July 1975)

Prime Crew:

Commander, Thomas P. Stafford  
Command Module Pilot, Vance D. Brand  
Docking Module Pilot, Donald K. Slayton

Backup Crew:

Commander, Alan L. Bean  
Command Module Pilot, Ronald E. Evans  
Docking Module Pilot, Jack R. Lousma

Support Crew:

Richard H. Truly  
Robert F. Overmyer  
Robert L. Crippen  
Karol J. Bobko

ASTRONAUTS WHO HAVE FLOWN (41)

One Flight (24)

William A. Anders	Apollo 8
M. Scott Carpenter	Mercury 7
Gerald P. Carr	Skylab 4
Walter Cunningham	Apollo 7
Charles M. Duke, Jr.	Apollo 16
Donn F. Eisele	Apollo 7
Ronald E. Evans	Apollo 17
Owen K. Garriott	Skylab 3
Edward G. Gibson	Skylab 4
John H. Glenn	Mercury 6
Fred W. Haise, Jr.	Apollo 13
James B. Irwin	Apollo 15
Joseph P. Kerwin	Skylab 2
Jack R. Lousma	Skylab 3
Thomas K. Mattingly, II	Apollo 16
Edgar D. Mitchell	Apollo 14
William R. Pogue	Skylab 4
Stuart A. Roosa	Apollo 14
Harrison H. Schmitt	Apollo 17
Russell L. Schweickart	Apollo 9
John L. Swigert, Jr.	Apollo 13
Paul J. Weitz	Skylab 2
Edward H. White, II	Gemini IV
Alfred M. Worden	Apollo 15

Two Flights (10)

Edwin E. Aldrin, Jr.	Gemini XII/Apollo 11
Neil A. Armstrong	Gemini VIII/Apollo 11
Alan L. Bean	Apollo 12/Skylab 3
Frank Borman	Gemini VII/Apollo 8
Michael Collins	Gemini X/Apollo 11
L. Gordon Cooper	Mercury 9/Gemini V
Richard F. Gordon, Jr.	Gemini XI/Apollo 12
Virgil I. Grissom	Mercury 4/Gemini III
James McDivitt	Gemini IV/Apollo 9
Alan B. Shepard, Jr.	Mercury 3/Apollo 14

Three Flights (4)

Eugene A. Cernan  
Walter M. Schirra  
David R. Scott  
Thomas Stafford

Gemini IX-A/Apollo 10/  
Apollo 17  
Mercury 8/Gemini VI-A/  
Apollo 7  
Gemini VIII/Apollo 9/  
Apollo 15  
Gemini VI-A/Gemini IX-A/  
Apollo 10

Four Flights (3)

Charles Conrad  
James A. Lovell, Jr.  
John W. Young

Gemini V/Gemini XI/  
Apollo 12/Skylab 2  
Gemini VII/Gemini XII/  
Apollo 8/Apollo 13  
Gemini III/Gemini X/  
Apollo 10/Apollo 16

Mission	Crew	Date	Duration hr:min:sec	Remarks
Mercury-Redstone 3	Shepard	May 5, 1961	00:15:22	Suborbital flight — first American in space. USS Champlain, Atlantic recovery (A). Spacecraft call sign Freedom 7.
Mercury-Redstone 4	Grissom	July 21, 1961	00:15:37	Also suborbital; successful flight but spacecraft sank, astronaut rescued. USS Randolph (A). Liberty Bell 7.
Mercury-Atlas 6	Glenn	Feb. 20, 1962	04:55:23	Three-orbit flight; first American in orbit; retro-pack retained when erroneous signal indicated heat shield possibly loose; capsule landed 40 miles uprange. USS Noa, (A). Friendship 7.
Mercury-Atlas 7	Carpenter	May 24, 1962	04:56:05	Also three-orbit mission; yaw error at manual retrofire caused 250-mile landing overshoot. USS Pierce (A). Aurora 7.
Mercury-Atlas 8	Schirra	Oct. 3, 1962	09:13:11	Six-orbit flight; capsule landed 4-1/2 miles from recovery ship USS Kearsarge, Pacific (P). Sigma 7.
Mercury-Atlas 9	Cooper	May 15 and 16 1963	34:19:49	Twenty-two orbits to evaluate effects on man of 1 day in space; landed 4-1/2 miles from USS Kearsarge (P). Faith 7.
Gemini-Titan III	Grissom, Young	March 23, 1965	04:53:00	Three-orbit demonstration of the spacecraft; maneuver over Texas on first pass changed orbital path of a manned spacecraft for first time; landed about 50 miles uprange. USS Intrepid (A). Molly Brown (only Gemini named).
Gemini-Titan IV	McDivitt, White	June 3 to 7, 1965	97:56:11	Four-day flight with White first American to walk in space in 20-minute extravehicular activity (hatch open 36 minutes); after 62 revolutions of Earth, landed 50 miles uprange from USS Wasp (A).
Gemini-Titan V	Cooper, Conrad	Aug. 21 to 29, 1965	190:55:14	First use of fuel cells for electric power; evaluated guidance and navigation system for future rendezvous missions; incorrect navigation coordinates from ground control resulted in landing 90 miles short; 120 revolutions. USS Lake Champlain (A).
Gemini-Titan VII	Borman, Lovell	Dec. 4 to 18, 1965	330:35:31	Longest-duration Gemini flight; provided rendezvous target for Gemini VI-A; crew flew portions of mission in shirtsleeves for first time; 206 revolutions; landed 6.4 miles from target. USS Wasp (A).
Gemini-Titan VI-A	Schirra, Stafford	Dec. 15 and 16, 1965	25:51:24	Rescheduled to rendezvous with Gemini VII after original target Agena failed to orbit; VI-A launch postponed 3 days when launch vehicle engines automatically shut down 1.2 seconds after ignition; completed first space rendezvous; after 16 revolutions, landed within 7 miles of target to initiate series of pinpoint landings by Gemini spacecraft. USS Wasp (A).
Gemini-Titan VIII	Armstrong, Scott	March 16, 1966	10:41:26	First docking of one space vehicle with another; about 27 minutes after docking, Gemini-Agena combination began to yaw and roll at increasing rates; emergency procedures included undocking, deactivation of malfunctioning spacecraft control system, activation of reentry control system; mission was terminated and, midway through 7th revolution, spacecraft landed 1.1 miles from planned landing point in secondary recovery area in western Pacific; destroyer USS Mason picked up crew 3 hours later.
Gemini-Titan IX-A	Stafford, Cernan	June 3 to 6, 1966	72:21:00	Rescheduled to rendezvous and dock with augmented target docking adapter after original target Agena failed to orbit; ATDA shroud did not completely separate, making docking impossible; three different types of rendezvous were completed; Cernan carried out 2 hours 7 minutes of EVA; 44 revolutions; 0.38 miles from target. USS Wasp (A).

Gemini-Titan X	Young, Collins	July 18 to 21, 1966	70:46:39	First use of Agena target vehicle's propulsion systems; spacecraft also rendezvoused with Gemini VIII target vehicle; Collins had 49 minutes of EVA standing in hatch, 39-minute EVA to retrieve experiment from Agena VIII; 43 revs; 3.4 miles, USS Guadalcanal (A).
Gemini-Titan XI	Conrad, Gordon	Sept. 12 to 15, 1966	71:17:08	Gemini record altitude (739.2 miles) reached using Agena propulsion after first-revolution rendezvous and docking; Gordon fastened Agena-anchored tether to Gemini docking bar, and spacecraft later made two revolutions of Earth in tethered configuration; Gordon 33-minute EVA and 2-hour 5-minute standup EVA; 44 revs; 1.5 miles, USS Guam (A).
Gemini-Titan XII	Lovell, Aldrin	Nov. 11 to 15, 1966	94:34:31	Final Gemini flight; Aldrin logged 2-hour 29-minute standup EVA, 55-minute standup EVA, and 2-hour 6-minute EVA for Gemini record total of 5 hours 30 minutes of extravehicular activity; 59 revs, 2.6 miles, USS Wasp (A).
Apollo-Saturn 7	Schirra, Eisele, Cunningham	Oct. 11 to 22, 1968	260:09:03	First manned flight of Apollo spacecraft command-service module only, 163 revolutions; USS Essex (A) - all Apollo spacecraft splashed down within 10 miles of predicted landing point.
Apollo-Saturn 8	Borman, Lovell, Anders	Dec. 21 to 27, 1968	147:00:42	First flight to the Moon (command-service module only); views of lunar surface televised to Earth; 10 revolutions of the Moon; USS Yorktown (P).
Apollo-Saturn 9	McDivitt, Scott, Schweickart	March 3 to 13, 1969	241:00:54	First manned flight of lunar module; spacecraft call signs for communications identification when undocked: CSM "Gumdrop" and LM "Spider"; Schweikart 37-minute EVA from LM; 151 revs; USS Guadalcanal (A).
Apollo-Saturn 10	Stafford, Young, Cernan	May 18 to 26, 1969	192:03:23	First lunar module orbit of Moon; call signs Charlie Brown and Snoopy; 31 revs of Moon (4 revs by undocked LM); USS Princeton (P).
Apollo-Saturn 11	Armstrong, Collins, Aldrin	July 16 to 24, 1969	195:18:35	First lunar landing; call signs Columbia and Eagle; lunar stay time 21 hours 36 minutes 21 seconds, Armstrong and Aldrin EVA (hatch open to hatch close) 2 hours 31 minutes 40 seconds, lunar surface samples 48.5 pounds; 30 revs; USS Hornet (P).
Apollo-Saturn 12	Conrad, Gordon, Bean	Nov. 14 to 24, 1969	244:36:25	Yankee Clipper and Intrepid; stay time 31 hours 31 minutes, Conrad and Bean EVAs 3 hours 56 minutes and 3 hours 49 minutes, lunar samples 74.7 pounds plus parts from Surveyor 3 unmanned spacecraft; 45 revs; USS Hornet (P).
Apollo-Saturn 13	Lovell, Swigert, Haise	Apr. 11 to 17, 1970	142:54:41	Odyssey and Aquarius; mission aborted after service module oxygen tank ruptured; using lunar module oxygen and power until just before reentry, crew returned safely to Earth; USS Iwo Jima (P).
Apollo-Saturn 14	Shepard, Roosa, Mitchell	Jan 31 to Feb 9, 1971	216:01:57	Kitty Hawk and Antares; stay time 33:31, Shepard and Mitchell EVAs 4:48 and 4:35, samples 96 pounds; 34 revs; USS New Orleans (P).
Apollo-Saturn 15	Scott, Worden Irwin	July 26 to Aug 7, 1971	295:11:53	Endeavour and Falcon; first use of lunar roving vehicle; stay time 66:55; Scott standup EVA 33 minutes, Scott and Irwin EVAs 6:33, 7:12 and 4:50, Worden trans-Earth EVA 38 minutes, samples 170 pounds; 74 revs; USS Okinawa (P).
Apollo-Saturn 16	Young, Mattingly Duke	April 16 to April 27, 1972	265:51:05	Casper and Orion; stay time 71:02; Young and Duke EVAs 7:11, 7:23 and 5:40, Mattingly trans-Earth EVA 1:24, samples 213 pounds; 64 revs; USS Ticonderoga (P).
Apollo-Saturn 17	Cernan, Evans, Schmitt	Dec. 7 to Dec. 19, 1972	301:51:59	America and Challenger; stay time 75:00; Cernan and Schmitt EVAs 7:12, 7:37 and 7:15, Evans trans-Earth EVA 1:06, samples 243 pounds; 75 revs; USS Ticonderoga (P).

MISSION	CREW	DATE	DURATION	DESCRIPTION
Skylab 2 first manned mission	Conrad Kerwin Weitz	May 25 to June 22, 1973	672:49:49 (28 days)	First U.S. manned orbiting space station mission; crew deployed solar shield; released stuck solar panel. These repair activities permitted manned operations of the Orbital Workshop after meteoroid shield was damaged and torn off during boost. Data obtained on 46 of 55 experiments. Crew performed 3 space walks totaling 5 hours, 41 minutes.
Skylab 3	Bean Garriott Lousma	July 28 to Sept. 25, 1973	1427:09:04 (59 days)	Crew performed systems and operational tests, deployed new solar shield, replaced rate gyros. Crew substantially exceeded pre-mission plans for scientific activities. Performed three space walks totaling 13 hours, 44 minutes.
Skylab 4	Carr Gibson Pogue	Nov. 16, 1973 to Feb. 8, 1974	2017:16:30 (84 days)	Final Skylab manned visit; longest flight of men in space. Crew replenished coolant supplies, repaired antenna, made observations of Comet Kohoutek. Crew performed four space walks totaling 22 hours, 21 minutes. Set record for space walk duration -- 7 hours, 1 minute.